

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-17. (Cancelled)

18. (Previously Presented) A lift device according to Claim 37, wherein a connecting device (42) is provided on the side of the slide bar(s) (16a, 16b) opposite of the force transmission device, which is connected with a spring tensioning device (41) having a pressure spring (18) seated upon a spring abutment (40), which is rigidly connected with a guide bar (27b).

19. (Cancelled)

20. (Currently Amended) A lift device according to Claim 37, wherein the at least one lever (25a, 25b) includes two levers, and two lift bars (17a, 17b) are provided in parallel orientation and bracketing the two levers (25a, 25b).

21. (Currently Amended) A lift device according to Claim 37, wherein the at least one slide bar includes two slide bars, and the slide bars (16a, 16b) are associated with rollers (22a, 22b) for horizontal guidance on guide bars (27, 27a, 27b).

22. (Previously presented) A lift device according to Claim 21, wherein the rollers (22a, 22b) are mounted rotatably in the slide bars (16a, 16b).

23. (Previously presented) A lift device according to Claim 21, wherein the rollers are mounted rotatably in the guide bars.

24. (Previously Presented) A lift device according to Claim 37, wherein guide rollers (22a, 22b) are provided for vertical guidance of guide elements (13a, 13b).
25. (Previously presented) A lift device according to Claim 24, wherein the guide elements (13a, 13b) are connected with the lift bars (17a, 17b).
26. (Previously presented) A lift device according to Claim 36, wherein slide blocks (15a, 15b) are provided for guiding the force transmission device (16a, 16b, 17a, 17b, 25a, 25b) in a sideways direction.
27. (Withdrawn) Lift device according to Claim 1, wherein the force transmission device includes at least one pneumatic device (72, 73).
28. (Withdrawn) Lift device according to Claim 1, wherein the force transmission device includes at least one hydraulic device.
29. (Withdrawn) Lift device according to Claim 1, wherein the force transmission device includes a linear motor.
30. (Previously presented) A lift device according to Claim 36, wherein the force transmission device includes at least one motor drive (35) and a conversion device for converting the rotational movement of the motor drive (35) into a horizontal linear movement.
31. (Previously Presented) A lift device according to Claim 30, wherein an eccentric disk (38) is provided, which is drivable by a motor drive (35) and which is in operable association with one end (29a, 29b) of the lever (25a, 25b).

32. (Previously Presented) A lift device according to Claim 31, wherein the eccentric disk (38) carries an eccentric pin (38a) to the drive axis of the motor drive (35), which engages in a linkage mount (37a) provided on the one side of a crank (20),

wherein a pin (36) provided on the one side of the slide bar(s) (16a, 16b) engages in a linkage mount (37b) provided on the other side of the crank (20).

33. (Previously presented) A lift device according to Claim 31, wherein the motor drive (35) is provided with a pressure or pull spring (18), of which the spring effect supports the start-up of the motor drive (35) at least during lifting of the support device (2, 3B, 5).

34. (Withdrawn) Lift device according to Claim 33, wherein a connecting device (42) is provided on the other side of the slide bar(s) (16a, 16b), which is rigidly connected with a spring tensioning device (41), upon which a pressure spring (18) is seated on one end and which on the other side is seated upon a spring abutment (40) rigidly connected with the guide bar (27b).

35. (Previously presented) A lift device according to Claim 36, wherein two force transmission devices (16a, 16b, 17a, 17b, 25a, 25b, 18, 20) are provided in parallel arrangement to each other, which respectively carry segments of an outer roller track (2) or an inner roller track (3B) of the support device.

36. (Currently Amended) A lift device for lifting and lowering a support device (2, 3B, 5) of a transport track segment of a transport device for work pieces, the device comprising:

a work piece carrier (58), wherein the work pieces are deposited on the work piece carrier;

a force producing device (35, 72, 73), wherein the force producing device produces a force for lifting or lowering the support device (2, 3B, 5);

a force transmission device, wherein the force transmission device transmits the force from the force producing device to the support device; and

wherein the force transmission device includes at least one lever (25a, 25b) having a first end (29a, 29b) coupled to the force producing device (35, 72, 73), the first end (29a, 29b) guided for horizontal displacement, and having a second end (30a, 30b) coupled to the support device (2, 3B, 5), the second end (30a, 30b) guided for vertical displacement,

wherein the first end (29a, 29b) is linked to at least one slide bar (16a, 16b) oriented in the horizontal direction, wherein the second end (30a, 30b) is linked to at least one lift bar (17a, 17b) parallel to the at least one slide bar (16a, 16b), and

wherein the at least one lever includes two levers, and two slide bars (16a, 16b) are provided oriented parallel and bracketing the two levers (25a, 25b).

37. (Cancelled)

38. (New) A lift device for lifting and lowering a support device (2, 3B, 5) of a transport track segment of a transport device for work pieces, the device comprising:

a work piece carrier (58), wherein the work pieces are deposited on the work piece carrier;

a force producing device (35, 72, 73), wherein the force producing device produces a force for lifting or lowering the support device (2, 3B, 5);

a force transmission device, wherein the force transmission device transmits the force from the force producing device to the support device; and

wherein the force transmission device includes at least one lever (25a, 25b) having a first end (29a, 29b) coupled to the force producing device (35, 72, 73), the first end (29a, 29b) guided for horizontal displacement, and having a second end (30a, 30b) coupled to the support device (2, 3B, 5), the second end (30a, 30b) guided for vertical displacement,

wherein the first end (29a, 29b) is linked to at least one slide bar (16a, 16b) oriented in the horizontal direction, wherein the second end (30a, 30b) is linked to at least one lift bar (17a, 17b) parallel to the at least one slide bar (16a, 16b), and

wherein the at least one lever (25a, 25b) includes two levers, and two lift bars (17a, 17b) are provided in parallel orientation and bracketing the two levers (25a, 25b).

39. (New) A lift device for lifting and lowering a support device (2, 3B, 5) of a transport track segment of a transport device for work pieces, the device comprising:

a work piece carrier (58), wherein the work pieces are deposited on the work piece carrier;

a force producing device (35, 72, 73), wherein the force producing device produces a force for lifting or lowering the support device (2, 3B, 5);

a force transmission device, wherein the force transmission device transmits the force from the force producing device to the support device; and

wherein the force transmission device includes at least one lever (25a, 25b) having a first end (29a, 29b) coupled to the force producing device (35, 72, 73), the first end (29a, 29b) guided for horizontal displacement, and having a second end (30a, 30b) coupled to the support device (2, 3B, 5), the second end (30a, 30b) guided for vertical displacement,

wherein the first end (29a, 29b) is linked to at least one slide bar (16a, 16b) oriented in the horizontal direction, wherein the second end (30a, 30b) is linked to at least one lift bar (17a, 17b) parallel to the at least one slide bar (16a, 16b), and

wherein the at least one slide bar includes two slide bars, and the slide bars (16a, 16b) are associated with rollers (22a, 22b) for horizontal guidance on guide bars (27, 27a, 27b).

40. (New) A lift device for lifting and lowering a support device (2, 3B, 5) of a transport track segment of a transport device for work pieces, the device comprising:

a work piece carrier (58), wherein the work pieces are deposited on the work piece carrier;

a force producing device (35, 72, 73), wherein the force producing device produces a force for lifting or lowering the support device (2, 3B, 5);

a force transmission device, wherein the force transmission device transmits the force from the force producing device to the support device; and

wherein the force transmission device includes at least one lever (25a, 25b) having a first end (29a, 29b) coupled to the force producing device (35, 72, 73), the first end (29a, 29b) guided for horizontal displacement, and having a second end (30a, 30b) coupled to the support device (2, 3B, 5), the second end (30a, 30b) guided for vertical displacement,

wherein the first end (29a, 29b) is linked to at least one slide bar (16a, 16b) oriented in the horizontal direction, wherein the second end (30a, 30b) is linked to at least one lift bar (17a, 17b) parallel to the at least one slide bar (16a, 16b), and

wherein guide rollers (22a, 22b) are provided for vertical guidance of guide elements (13a, 13b).

41. (New) A lift device for lifting and lowering a support device (2, 3B, 5) of a transport track segment of a transport device for work pieces, the device comprising:

a work piece carrier (58), wherein the work pieces are deposited on the work piece carrier;

a force producing device (35, 72, 73), wherein the force producing device produces a force for lifting or lowering the support device (2, 3B, 5);

a force transmission device, wherein the force transmission device transmits the force from the force producing device to the support device; and

wherein the force transmission device includes at least one lever (25a, 25b) having a first end (29a, 29b) coupled to the force producing device (35, 72, 73), the first end (29a, 29b) guided for horizontal displacement, and having a second end (30a, 30b) coupled to the support device (2, 3B, 5), the second end (30a, 30b) guided for vertical displacement,

wherein the force transmission device includes at least one motor drive (35) and a conversion device for converting the rotational movement of the motor drive (35) into a horizontal linear movement, and

wherein an eccentric disk (38) is provided, which is drivable by a motor drive (35) and which is in operable association with one end (29a, 29b) of the lever (25a, 25b).